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PATENT
2224-0193P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: TAKAHASHI, Hiroshi et al.
Int'l. Appl. No.: PCT/JP01/02203
Appl. No.: New Group:
Filed: November 21, 2001 Examiner:
For: TRANSMITTABLE LIGHT-SCATTERING
SHEET AND LIQUID CRYSTAL DISPLAY
DEVICE

PRELIMINARY AMENDMENT

BOX PATENT APPLICATION

Assistant Commissioner for Patents
Washington, DC 20231

November 23, 2001

Sir:

The following Preliminary Amendments and Remarks are respectfully submitted in connection with the above-identified application.

AMENDMENTS

IN THE SPECIFICATION:

Please amend the specification as follows:

Before line 1, insert --This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/JP01/02203 which has an International filing date of March 21, 2001, which designated the United States of America.--

Please replace the paragraph beginning on page 58, line 21, with the following rewritten paragraph:

--Cellulose acetate propionate (2.9 parts by weight) (acetylation degree 2.5%, propylation degree: 45%. Number-average molecular weight in terms of polystyrene: 75000, manufactured by Eastman, Ltd., CAP-482-20) and 2.1 parts by weight of copolyester (fluorene-modified polyester, OPET; manufactured by Kanebo Co., Ltd., OP7-40) were dissolved in 95 parts by weight of THF. The solution was cast on a triacetylcellulose film with the use of wire bar #34, and the cast film was allowed to stand in an oven at a temperature of 60 °C for 2 minutes, and then THF was evaporated to form a coating layer having thickness of about 2 μ m. When a sheet of the coating layer was observed with a transmission optical microscope, the sheet had a droplet phase structure same as Example 4, in which two kinds of dispersion phases different in size were dispersed regularly with an average interphase distance. Moreover, the total light transmittance of the sheet was 92%.--

Please substitute the paragraph abridging pages 58 and 59 with the following paragraph:

--Cellulose acetate propionate (3 parts by weight) (acetylation degree:2.5%, propylation degree:45%, number-average molecular weight in terms of polystyrene:75000, manufactured by Eastman, Ltd., CAP-482-20) and 3 parts by weight of copolyester (fluorene-modified polyester, OPET; manufactured by Kanebo Co.,

Ltd., OP7-40) were dissolved in 84 parts by weight of THF. The solution was cast on a triacetylcellulose film with the use of wire bar #20, and the cast film was allowed to stand in an oven at a temperature of 60 °C for 2 minutes, and then THF was evaporated to form a coating layer having thickness of about 2 μm . When the sheet of the coating layer was observed with a transmission optical microscope, the sheet had a droplet phase structure same as Example 4, in which two kinds of dispersion phases different in size were dispersed regularly with an average interphase distance.

Moreover, the total light transmittance of the sheet was 93%.--

Please substitute the paragraph abridging pages 60 and 61 with the following paragraph:

--The results were shown in Fig. 7. As apparent from Fig. 7, while the scattering light intensity showed Gaussian distribution in the sheet of Comparative Example 2 in which the droplet phase structure randomly distributed, in the sheets of Examples first maximums of the scattered-light intensity were found at specific angles (3° in Example 4, 5° in Example 5, 12° in Example 6) and shoulder type second maximums of the scattered-light intensity were found in far-side angle range.--

Please amend the table on page 63 as follows:

Table 2

Diffusion Angle (02)	Example 4	Example 5	Example 6	Comparative Example 2	Comparative Example 3
5°	⊙	⊙	○	○	⊙
10°	⊙	⊙	⊙	○	○
15°	○	⊙	⊙	○	○
20°	○	○	⊙	△	○
25°	△	○	○	△	△
30°	△	○	○	△	△

REMARKS

The specification has been amended to provide a cross-reference to the previously filed International Application.

The specification has also been amended to correct typographical errors.

Entry of the above amendments is earnestly solicited. An early and favorable first action on the merits is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

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Attachment: VERSION WITH MARKINGS TO SHOW CHANGES MADE

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The paragraph beginning on page 58, line 21, has been rewritten as follows:

Cellulose acetate propionate (2.9 parts by weight) (acetylation degree 2.5%, propylation degree: 45%. Number-average molecular weight in terms of polystyrene: 75000, manufactured by Eastman, Ltd., CAP-482-20) and 2.1 parts by weight of copolyester (fluorene-modified polyester, OPET; manufactured by Kanebo Co., Ltd., OP7-40) were dissolved in 95 parts by weight of THF. The solution was cast on a triacetylcellulose film with the use of wire bar #34, and the cast film was allowed to stand in an oven at a temperature of 60 °C for 2 minutes, and then THF was evaporated to form a coating layer having thickness of about 2 μm . When a sheet of the coating layer was observed with a transmission optical microscope, the sheet had a droplet phase structure same as Example [1]4, in which two kinds of dispersion phases different in size were dispersed regularly with an average interphase distance. Moreover, the total light transmittance of the sheet was 92%.

The paragraph abridging pages 58 and 59 has been rewritten as follows:

Cellulose acetate propionate (3 parts by weight) (acetylation degree:2.5%, propylation degree:45%, number-average molecular weight in terms of polystyrene:75000, manufactured by Eastman, Ltd., CAP-482-20) and 3 parts by weight of copolyester (fluorene-modified polyester, OPET; manufactured by Kanebo Co., Ltd., OP7-40) were dissolved in 84 parts by weight of THF. The solution was cast on a triacetylcellulose film with the use of wire bar #20, and the cast film was allowed to stand in an oven at a temperature of 60 °C for 2 minutes, and then THF was evaporated to form a coating layer having thickness of about 2 μm . When the sheet of the coating layer was observed with a transmission optical microscope, the sheet had a droplet phase structure same as Example [1]4, in which two kinds of dispersion phases different in size were dispersed regularly with an average interphase distance. Moreover, the total light transmittance of the sheet was 93%.

The paragraph abridging pages 60 and 61 has been rewritten as follows:

The results were shown in Fig. 7. As apparent from Fig. 7, while the scattering light intensity showed Gaussian distribution in the sheet of Comparative Example 2 in which the

droplet phase structure randomly distributed, in the sheets of Examples first maximums of the scattered-light intensity were found at specific angles (3° in Example [1]4, 5° in Example [2]5, 12° in Example [3]6) and shoulder type second maximums of the scattered-light intensity were found in far-side angle range.--

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The table on page 63 has been amended as follows:

Table 2

Diffusion Angle (02)	Example 4	Example 5	Example 6	Comparative Example 12	Comparative Example 2b
5°	⊙	⊙	○	○	⊙
10°	⊙	⊙	⊙	○	○
15°	○	⊙	⊙	○	○
20°	○	○	⊙	△	○
25°	△	○	○	△	△
30°	△	○	○	△	△